

SEQUENCE LISTING

<110> Avalon Pharmaceuticals

<120> Cancer-Linked Gene as Target for Chemotherapy

<130> 689290-159

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<150> US/60/388,075

<151> 2002-06-11

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<170> PatentIn version 3.0

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| ggaattgaga | gacacagtta | aaagactcca | agttgctttc | tgccttttga | aaactcctga | 180 |
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| tgggggtgtc | ggagttgagc | ttgctcagca | agccagcatg | gctaggatga | gctttgttat | 360 |
| agcagcttgc | caattggtgc | tgggcctact | aatgacttca | ttaaccgagt | cttccataca | 420 |
| gaatagttag | tgtccacaac | tttgcgtagt | tgaatttctg | ccctggttta | ccccacagtc | 480 |
| aacttacaga | gaagccacca | ctgttgattg | caatgacctc | cgtttaacaa | ggattcccag | 540 |
| taacctctct | agtgcacac | aagtgttctt | cttacagagc | aataacatcg | cgaagactgt | 600 |
| ggatgagctg | cagcagcttt | tcaacttgac | tgaactagat | ttctcccaa | acaactttac | 660 |
| taacattaa | gaggtcgggc | tggcaaacct | aaccagctc | acaacgctgc | atttgaggga | 720 |
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| tctattaagg | ctccacctga | actccaacaa | attgaaagtt | attgatagtc | gctgggttga | 900 |
| ttctacaccc | aacctggaaa | ttctcatgat | cggagaaaac | cctgtgattg | gaattctgga | 960 |
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| cactcgggtg | gcaacaatta | aggttaacgg | gacccttctg | gatggtaacc | aggtgctaaa | 1920 |
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| ttccacagat | tatgaagtgt | gtctcacagt | gtccaatatt | catcagcaga | ctcaaaagtc | 2160 |
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 35 40 45
 Gly Leu Trp Asn Ser Thr Gln Leu Asn Gln Asp Phe Ala Val Asn Val
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 Tyr Ile Phe Cys Ser Leu Ser Tyr Ile Ser Gln Tyr Ser Val His Val
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 Leu Leu Lys Leu Trp Gly Val Arg Ser Glu Leu Ala Gln Gln Ala Ser
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 Met Ala Arg Met Ser Phe Val Ile Ala Ala Cys Gln Leu Val Leu Gly
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 Pro Gln Leu Cys Val Cys Glu Ile Arg Pro Trp Phe Thr Pro Gln Ser
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 His Ala Phe Ala Gly Leu Lys Asn Leu Leu Arg Leu His Leu Asn Ser
 260 265 270
 Asn Lys Leu Lys Val Ile Asp Ser Arg Trp Phe Asp Ser Thr Pro Asn
 275 280 285
 Leu Glu Ile Leu Met Ile Gly Glu Asn Pro Val Ile Gly Ile Leu Asp
 290 295 300
 Met Asn Phe Lys Pro Leu Ala Asn Leu Arg Ser Leu Val Leu Ala Gly
 305 310 315 320

Met Tyr Leu Thr Asp Ile Pro Gly Asn Ala Leu Val Gly Leu Asp Ser
 325 330 335
 Leu Glu Ser Leu Ser Phe Tyr Asp Asn Lys Leu Val Lys Val Pro Gln
 340 345 350
 Leu Ala Leu Gln Lys Val Pro Asn Leu Lys Phe Leu Asp Leu Asn Lys
 355 360 365
 Asn Pro Ile His Lys Ile Gln Glu Gly Asp Phe Lys Asn Met Leu Arg
 370 375 380
 Leu Lys Glu Leu Gly Ile Asn Asn Met Gly Glu Leu Val Ser Val Asp
 385 390 395 400
 Arg Tyr Ala Leu Asp Asn Leu Pro Glu Leu Thr Lys Leu Glu Ala Thr
 405 410 415
 Asn Asn Pro Lys Leu Ser Tyr Ile His Arg Leu Ala Phe Arg Ser Val
 420 425 430
 Pro Ala Leu Glu Ser Leu Met Leu Asn Asn Asn Ala Leu Asn Ala Ile
 435 440 445
 Tyr Gln Lys Thr Val Glu Ser Leu Pro Asn Leu Arg Glu Ile Ser Ile
 450 455 460
 His Ser Asn Pro Leu Arg Cys Asp Cys Val Ile His Trp Ile Asn Ser
 465 470 475 480
 Asn Lys Thr Asn Ile Arg Phe Met Glu Pro Leu Ser Met Phe Cys Ala
 485 490 495
 Met Pro Pro Glu Tyr Lys Gly His Gln Val Lys Glu Val Leu Ile Gln
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 Asp Ser Ser Glu Gln Cys Leu Pro Met Ile Ser His Asp Ser Phe Pro
 515 520 525
 Asn Arg Leu Asn Val Asp Ile Gly Thr Thr Val Phe Leu Asp Cys Arg
 530 535 540
 Ala Met Ala Glu Pro Glu Pro Glu Ile Tyr Trp Val Thr Pro Ile Gly
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 Asn Lys Ile Thr Val Glu Thr Leu Ser Asp Lys Tyr Lys Leu Ser Ser
 565 570 575
 Glu Gly Thr Leu Glu Ile Ser Asn Ile Gln Ile Glu Asp Ser Gly Arg
 580 585 590
 Tyr Thr Cys Val Ala Gln Asn Val Gln Gly Ala Asp Thr Arg Val Ala
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 Thr Ile Lys Val Asn Gly Thr Leu Leu Asp Gly Thr Gln Val Leu Lys
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 Ile Tyr Val Lys Gln Thr Glu Ser His Ser Ile Leu Val Ser Trp Lys

625 630 635 640
 Val Asn Ser Asn Val Met Thr Ser Asn Leu Lys Trp Ser Ser Ala Thr
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 Met Lys Ile Asp Asn Pro His Ile Thr Tyr Thr Ala Arg Val Pro Val
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 Asp Val His Glu Tyr Asn Leu Thr His Leu Gln Pro Ser Thr Asp Tyr
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 Glu Val Cys Leu Thr Val Ser Asn Ile His Gln Gln Thr Gln Lys Ser
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 Cys Val Asn Val Thr Thr Lys Asn Ala Ala Phe Ala Val Asp Ile Ser
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 Asp Gln Glu Thr Ser Thr Ala Leu Ala Ala Val Met Gly Ser Met Phe
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 Ala Val Ile Ser Leu Ala Ser Ile Ala Val Tyr Phe Ala Lys Arg Phe
 740 745 750
 Lys Arg Lys Asn Tyr His His Ser Leu Lys Lys Tyr Met Gln Lys Thr
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 Ser Ser Ile Pro Leu Asn Glu Leu Tyr Pro Pro Leu Ile Asn Leu Trp
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 <212> PRT
 <213> Homo sapiens

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 Pro Gln Leu Cys Val Cys Glu Ile Arg Pro Trp Phe Thr Pro Gln Ser
 35 40 45
 Thr Tyr Arg Glu Ala Thr Thr Val Asp Cys Asn Asp Leu Arg Leu Thr
 50 55 60
 Arg Ile Pro Ser Asn Leu Ser Ser Asp Thr Gln Val Leu Leu Leu Gln
 65 70 75 80
 Ser Asn Asn Ile Ala Lys Thr Val Asp Glu Leu Gln Gln Leu Phe Asn
 85 90 95

Leu Thr Glu Leu Asp Phe Ser Gln Asn Asn Phe Thr Asn Ile Lys Glu
 100 105 110
 Val Gly Leu Ala Asn Leu Thr Gln Leu Thr Thr Leu His Leu Glu Glu
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 Asn Gln Ile Thr Glu Met Thr Asp Tyr Cys Leu Gln Asp Leu Ser Asn
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 Leu Gln Glu Leu Tyr Ile Asn His Asn Gln Ile Ser Thr Ile Ser Ala
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 His Ala Phe Ala Gly Leu Lys Asn Leu Leu Arg Leu His Leu Asn Ser
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 Asn Lys Leu Lys Val Ile Asp Ser Arg Trp Phe Asp Ser Thr Pro Asn
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 Leu Glu Ile Leu Met Ile Gly Glu Asn Pro Val Ile Gly Ile Leu Asp
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 Met Asn Phe Lys Pro Leu Ala Asn Leu Arg Ser Leu Val Leu Ala Gly
 210 215 220
 Met Tyr Leu Thr Asp Ile Pro Gly Asn Ala Leu Val Gly Leu Asp Ser
 225 230 235 240
 Leu Glu Ser Leu Ser Phe Tyr Asp Asn Lys Leu Val Lys Val Pro Gln
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 Asn Pro Ile His Lys Ile Gln Glu Gly Asp Phe Lys Asn Met Leu Arg
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 Pro Ala Leu Glu Ser Leu Met Leu Asn Asn Asn Ala Leu Asn Ala Ile
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 Tyr Gln Lys Thr Val Glu Ser Leu Pro Asn Leu Arg Glu Ile Ser Ile
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 His Ser Asn Pro Leu Arg Cys Asp Cys Val Ile His Trp Ile Asn Ser
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 Asn Lys Thr Asn Ile Arg Phe Met Glu Pro Leu Ser Met Phe Cys Ala
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 Met Pro Pro Glu Tyr Lys Gly His Gln Val Lys Glu Val Leu Ile Gln
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Asp Ser Ser Glu Gln Cys Leu Pro Met Ile Ser His Asp Ser Phe Pro
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 Asn Arg Leu Asn Val Asp Ile Gly Thr Thr Val Phe Leu Asp Cys Arg
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 Ala Met Ala Glu Pro Glu Pro Glu Ile Tyr Trp Val Thr Pro Ile Gly
 450 455 460
 Asn Lys Ile Thr Val Glu Thr Leu Ser Asp Lys Tyr Lys Leu Ser Ser
 465 470 475 480
 Glu Gly Thr Leu Glu Ile Ser Asn Ile Gln Ile Glu Asp Ser Gly Arg
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 Thr Ile Lys Val Asn Gly Thr Leu Leu Asp Gly Thr Gln Val Leu Lys
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 Ile Tyr Val Lys Gln Thr Glu Ser His Ser Ile Leu Val Ser Trp Lys
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